TO CORRESPONDENTS.

"F. K."—The span of the Menai Bridge is 580 feet; the span of Hungerford Bridge 674 feet.

"T. R." (may repair his chimney guard without fear), "J. L.," "H. B.," "Southwark," "C. H. S.," "E. T. B." (shall be mentioned), "An American," "E. P." (the cause is condensation: good ventilation would reduce it), "G. W.," "B.," "Old Lady," "J. L.," Lille (glad to hear from him), "J. B. R.," "J. W. P.," "W. H. C., T. M., and J. R.," "J. J. H.," "Dr. S." (if our correspondent saw the statement in THE BUILDER he would find it correct), "F. A." (we are unable to test the accuracy of advertisers), "W. S.," "C. D. Y. and Co.," "*Oyster*," "J. L.," "H. T. B." (the paper shall appear, with a few trifling omissions), "Mr. G.," "F. C. J," "C. C." (not in our line), "J. B. W.," "B. W.," "J. S.," "W. J. D.," "W. M."

"*Books and Addresses.*"—We have not time to point out books or find addresses.

NOTICE.—All communications respecting *advertisements* should be addressed to the "Publisher," and not to the "Editor:" all other communications should be addressed to the EDITOR, and *not* to the Publisher.

ADVERTISEMENTS.

NEWS! NEWS! NEWS!—The best, cheapest, and largest Newspaper in the world—LLOYD'S WEEKLY LONDON NEWSPAPER contains sixty large columns of the latest intelligence from all parts of the globe, price only threepence, postage free. Send three postage stamps to E. LLOYD, 12, Salisbury-square, London, and receive one copy as a sample.

On Wednesday next, price 1s.

SUGGESTIONS for IMPROVING the VALUE of RAILWAY PROPERTY, &c.
By WILLIAM KINGDON, Esq.
Author of "America and the British Colonies," "The Peerage Chart," "Dictionary of Quotations," &c.
WHITTAKER and Co., Ave Maria-lane.

Just published for 1851, price 4s. the 41st edition of

SKYRING'S BUILDERS' PRICES,

calculated from the present Market Prices of Materials; containing a variety of new and useful Information, with copious Abstracts of the Metropolitan Buildings Act, &c.
Sold by LONGMAN and CO, Paternoster-row, and may be had of all Booksellers.

SUBSCRIBERS to the ART-JOURNAL are respectfully informed that in addition to the usual Two Engravings of Steel, from Pictures in the Vernon Gallery, of "ANNE DIVIDING SPOILS," Engraved by T. Smith, after Sir W. Allan, R.A.; and "THE ENTHUSIAST," Engraved by H. Beckwith, after T. Lane, the ART-JOURNAL, No CL., for December, contains, "THE BIRTH OF THE ROSE," Engraved on Steel by T. W. Knight, from the Statue by B. Jennings; and Illustrations on wood of "H Pyramus & Thisbe from W. Harvey; and "The Castle Garden," drawn by R. W. Hulme. The Literary Contents include, Preparations in Belgium for the Exhibition of 1851; Preparations in Austria for the Exhibition of 1851; On the Applications of Science to the Fine and Useful Arts—Chemistry of Pottery; Permission by Robert Hunt; Picture Sales of the Month; Portrait of Sir John Watson Gordon; Portrait of John Hogan, the National Gallery; Obituary—Sir William Pilkington, Bart., Charles Seborn, Art in the Provinces, Nottingham, Glasgow, Edinburgh; the Carriage Manufactory of Messrs Holmes, of Derby, Illustrated; the Water Exhibition at Chelsea; Government Schools of Design; the Building for the Exhibition of 1851; Thoughts and Suggestions on the Exhibition of 1851—The Time for Receiving Contributions; Correspondence; Art in Continental States—Munich; Visits to the Manufacturing Districts—Rotherham and Sheffield, Illustrated; the Palace of Labour—Exhibition of 1851.
Published, GEORGE VIRTUE, 26, Paternoster-row.

THE PRIZE OF ONE HUNDRED GUINEAS.—A Prize of 100 Guineas has been offered by the Proprietors of the ART-JOURNAL for an ESSAY "On the best mode of rendering the Exhibition of the Works of Industry of all Nations, to be held in London in 1851, practically useful to the British Manufacturer."
Essays, in competition, must be sent to the Office of the ART-JOURNAL, 49, Pall-mall, on or before the 30th of June, 1851, each containing a signature, and accompanied by a sealed letter with the same signature, which letter will not be opened until the adjudication has been made.
There will be no restriction as to the length of the Essay; but it will be advisable not to exceed twelve or fifteen pages such as the ART-JOURNAL.
The proprietors will claim the right to publish the Prize Essay in the ART-JOURNAL, and also in the Illustrated Catalogue of the Exhibition.
The Prize will be adjudged on or before the 16th of July. The Adjudicators will be J. R. PORTER, Esq., Secretary of the Board of Trade; ASHLEY PELLATT, Esq., Manufacturer; and THOMAS WRIGHT, M.A., F.S.A., Member of the Institute of France.

ILLUSTRATED CATALOGUE OF THE GREAT EXHIBITION OF 1851.—Manufacturers generally have been informed of the progress in progress for publishing the Exhibition of 1851, by several Hundred Wood Engravings of the choicest of the objects it will contain. These will be printed "by hand" (not by machinery), and on fine paper.
No cost whatever will be incurred by the Manufacturer; but it is absolutely essential for any Manufacturer, who desires to secure admission for any of his productions into this work, to make immediate application on the subject to the Editor of the ART-JOURNAL. No Engraving will be suffered to appear prior to the 1st of May, 1851.
The Engravings will be first published in extra Parts of the ART-JOURNAL, and be afterwards collected into a volume, which—beautifully bound, with Views and Plans of the Building, Title-Page, Contents, &c.—will, it is presumed, form a permanent Record of the Exhibition, and a key to the most meritorious Manufacturers of all parts of the world.

TO ADVERTISERS.—OF the ART-JOURNAL for JANUARY, TWENTY THOUSAND will be printed. Advertisers, to secure a place in that Number, must send their Advertisements to Mr. CLARK, Manager of the Advertising Department, 49, Pall-mall, on or before the 15th of December.

Just published, price 2s. 6d.

HYDRAULIC TABLES. (Revised Edition.) PRACTICAL TABLES TO FACILITATE HYDRAULIC AND OTHER CALCULATIONS.
By NATHANIEL BEARDMORE.
Member of the Institution of Civil Engineers, &c. &c.
CONTENTS:—Tables for the Discharge of Water through Sluices from Tanks, Reservoirs, and Vertical Pipes, head 1/2 to 220 feet—over Weirs, depth 1/16 to 3 feet—Mean Surface and Bottom Velocities of Rivers and Tidal Estuaries, 2 to 60 feet per minute—Discharge of Pipes and Culverts, universal Table—Arterial Drains and other Cuts, from 12 inches to 20 feet in depth, with Bottom Widths from 3 to 1,200 feet—Theoretic Head required for passing bends at various velocities—Value of Water in Horse Power for one foot of fall, and Application to Mills—Tables of Expenditure of Water, Population, and proportional Drainage Areas—Flood Discharges, and Mean ditto for various Rainfalls—Weight per yard, and safe Head of Water—Iron Pipes—Safe Load of Beams, 6 to 30 inches in depth, with proportional bottom Flanches—Tables of Weights of Iron and other Metals, with properties of various materials—Useful Weights and Measures—Velocities—Gradients—Comparative Measures, Feet and Chains—Tables for Marine Surveying, Mountain Barometer, Equivalent Pressures of Mercury and Water, Connected with Tables of the Areas and Circumferences of Circles—Powers and Roots—and Short Tables of Logarithms.
The whole in a clear and condensed form for easy reference by practical men, and for every day use, chiefly in the Hydraulic Branches of Engineering; preceded by a description of each Table, with method of use.
Printed and published by WATERLOW and SONS, Parliament-street, by extension: WEALE, 59, High Holborn; and may be had of all Booksellers.
October, 1850.

BUILDERS' BENEVOLENT INSTITUTION.—An ELECTION of FIVE PENSIONERS, Three Males and Two Females, took place at the London Tavern, Bishopsgate-street, on Thursday, the 28th inst.

WILLIAM CUBITT, Esq., M.P., President, in the Chair.

The successful candidates were:—

MALES.		FEMALES.	
William Brand	1,138	Sarah Bodcock	819
Joseph Watson	1,089	Jemima Ford	884
James Caldow	656		

The remainder polled the following numbers, viz.—

MALES.		FEMALE.	
John Allen	542		
Walter Efford	372	Joseph Compton May	310
James Beamiss	331		
Daniel Hewett	644		
Samuel James Buckingham	116	Elizabeth Rees	194

A. G. HARRIS, Sec.

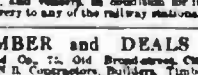
REDUCED PRICES.—EDWARD SIMMS late William Clement, of Wilton-road, Pimlico Basin, begs to acquaint Builders and the Trade that he has now on hand, at his Manufactory (the first of its kind ever established), a very large Assortment of Dry and Well-seasoned OAK and DEAL PREPARED FLOORING BOARDS and MATCH BOARDING of all sorts, from 1 inch to 1½ inch thick, planed to a parallel width and thickness, and at nearly Reduced Prices. Also, Timber, Deals, Oak Planks, Scantlings, Sash Mills, Mouldings prepared by Machinery, Lathe, &c.—Apply at E. SIMMS late W. Clement's Flooring Manufactory, Wilton-road, Pimlico Basin.

THOMAS ADAMS, Mahogany and Timber Merchant, Bermondsey New-road, Southwark, near the Bricklayers' Arms, is SELLING SEASONED FLOORING at LESS PRICES THAN ANY ADVERTISED; also matched boards and mouldings prepared from the very best material and in a superior manner. Old deals and scantling of every dimension, mahogany, cedar, rosewood, wainscot, pine, beech, oak, &c.; pantile, oak, and fir laths; wheelwrights' goods. All sawn and prepared goods (except timber) delivered free of expense. Having changed to mill prices. Very extensive drying sheds.
N.B. English timber taken in exchange for foreign.

GEORGE HORATIO WILKINSON, Timber and Mahogany Merchant, 190, High-street, Shoreditch, nearly facing the terminus of the Eastern Counties Railway, has always on hand a large stock of PREPARED FLOORING BOARDS, in every variety and thickness, well seasoned and ready for use. Timber and deals of all descriptions at the lowest possible prices; also mahogany, rosewood, and other hard woods in logs, planks, board, and veneers, in condition for immediate use. No charge for delivery to any of the railway stations.

FOR TIMBER and DEALS apply to SIMMS and Co., 72, Old Broad-street, City, Shipowners and Importers—H. R. Contractors, Builders, Timber Merchants, and Manufacturers purchasing largely supplied by rail, canal, and coastwise, in every part of the kingdom.—Direct from the docks, and wholesale only.

MEMEL TIMBER for SALE.—Above 1,200 loads of excellent TIMBER, as 6in. 6d. per load average length 30 feet, 12 inches square.—Apply at HEATH'S Wharf, Adelphi.—The Public are requested to inspect the quality of this Timber, and not to believe the reports of interested parties.



SAW MILLS, GILLINGHAM-STREET, PIMLICO.
TIMBER of any size, PLANK, DEALS, and BATTENS, &c., Sawn on the most approved principle, Boards, &c., Prepared, Matched, and Grooved, by Mair's Patent Machinery. The Mills have all the advantages of navigation and water-carriage, being connected with the Thames by the Grosvenor Canal. Goods fetched from the docks and carted home free of charge.
Address to HENRY SOUTHAM,
Saw Mills, Gillingham-street, Pimlico.
N.B. Estimates given for Sawing and Planing.

PAPER-HANGINGS at E. T. ARCHER'S Manufactory for English and Warehouse for English and French Paper-hangings, and all materials connected with the trade. The Panelled Decorations are fitted up on the walls of an extensive range of show-rooms, giving at one view a drawing or dining-room furnished fit for occupation.

LIST OF PRESENT PRICES.

Painted marble, granite, and oak papers	1d. per yard.
Superfine bed-room papers	1d. "
Satin ground papers for bed-rooms, drawing and dining rooms	2½. "
Flock papers on grounds, and Grotesque Book on oak	4d. "
Bronze drawing-room papers	6d. "
Rich gold paper	1s. 6d. "
Ditto and Flock	2s. 6d. "

Patterns and the moulding always in stock.
E. T. ARCHER, 461, OXFORD-STREET, LONDON.
January, 1, 1850

CHEAP PAPER-HANGINGS.—W. B. SIMPSON, 128, WEST STRAND, begs to inform his patrons, and the public in general, that in order to meet the demands of the times, he has made arrangements to execute paper-hangings of every description, at the lowest possible prices, and is now ready to supply BED-ROOM PAPERS OF GOOD PATTERN at ONE PENNY PER YARD, and oak, marble, satin, flock, and gold papers as cheap as any house in London, in addition to his usual EXTENSIVE STOCK of FRENCH and ENGLISH PAPER-HANGINGS and his elegant assortment of the PATENT WASHABLE PAPER-hanging DECORATIONS, which are made exclusively by him.

PATENT WHITE ZINC PAINT.—JOHN WARNER and SONS are prepared to supply this paint to builders, painters, and plumbers, on wholesale terms. It is of a pure white colour, is not affected by sea water, sulphuretted hydrogen, or any of the gases; and preserves its original colour where white lead paint will not.—Proper notes to be had at J. Warner and Sons', 6, Crescent, Jewin-st., London.

HUBBUCK'S PATENT WHITE ZINC PAINT.—ANNOUNCEMENT.

For MARINE USES, it possesses the following advantages:—It is whiter than any other Paint, and retains its colour for years, unaffected by bilge-water, or noxious vapours from cargo. The White Paint in the hold of a ship, after discharging a sugar cargo, is found to be as white as the year before, when newly painted. Under them and other circumstances, when every other paint hitherto known and tried has failed, "White Zinc Paint" has preserved the freshness of its colour. Moreover, by virtue of its galvanic action on iron, it enters the pores, and forms an amalgam of the two metals, which protects the iron from rust, decay, or incrustation.
For the GENERAL PURPOSES of the decorative painter, the "White Zinc Paint" has been found unparalleled in whiteness, clearness of colour, durability, and beauty of texture. It becomes so hard as to admit of polishing equal to the finest coach panelling.
For SANITARY PURPOSES like "White Zinc Paint" is valuable, not only from its being totally free from every ingredient injurious to health, but from its combining chemical qualities which render it a powerful corrective where contagious diseases have prevailed; furniture or buildings painted with it are at once disinfected. Paralysis and Painters' Colic are avoided by its use, as well as similar results to the occupants of newly painted rooms. Apartments may be immediately occupied, without injury to the health of children or the most delicate constitution. It becomes cheaper than common paint, from its spreading over a much larger surface. Proof of this paint covers as much as is usually covered by 3 cwt. of white lead. Each cask is stamped with the name "Hubbuck—London—Patent," as the style of the Manufacturers. A shipper with full particulars may be had of the manufacturers, THOMAS HUBBUCK and SON, Colour Works, opposite the London Dock.

ALBERT LIFE ASSURANCE COMPANY.—Established 1838. No. 11, Waterloo-place, Pall-mall.
1. Members of Building Societies can insure in this office, per-mutate becoming due after their death, thus saving their families from the inconvenience and loss.
2. Business transacted in all the branches, and for all the objects of Life Assurance; all the policies being indisputable, excepting only in cases of fraud.
3. Immediate, survivorship, deferred annuities and endowments granted, and every other mode of provision for families arranged.
4. Premiums on the half credit system; retirement at limits for residence and voyaging, without extra premium, and naval and military lives not in active service assured at ordinary rates.
For prospectuses, with tables of premiums, information, &c., apply to HENRY WILLIAM SMITH, Actuary and Secretary.

THE YORKSHIRE FIRE and LIFE INSURANCE COMPANY. Established in York, 1824, and empowered by Act of Parliament. Capital 500,000.

TRUSTEES.
Lord Wenlock, Escrick Park.
J. L. Thompson, Esq., Sheriff Hutton Park.
Robt. Swann, Esq., York.
DIRECTORS.—Messrs Swann, Chapman, and Co., York.
AGENTS, &c. and SECRETARY.—Mr. W. L. Newman, York.

The attention of the public is particularly called to the terms this Company for life insurances, and to the distinctions which is made between males and female lives.

Extract from the Table of Premiums for Insuring 100*l.*

Age next birthday.	ANNUAL PREMIUMS. A MALE.	A FEMALE.	Age next birthday.	ANNUAL PREMIUMS. A MALE.	A FEMALE.
	Whole Life Premiums			Whole Life Premiums	
10	1 7 6	1 9 4	40	2 11 6	3 3 2
15	1 9 8	1 7 6	50	4 1 8	4 13 2
16	1 11 3	1 8 10	55	4 11 6	5 9 6
20	1 14 4	1 11 8	60	5 6 8	6 14 0
25	1 18 3	1 15 3	65	6 3 4	8 4 6
30	2 2 3	1 18 3	70	7 2 6	9 7 6
35	2 8 0	2 1 9	75	8 6 6	10 9 6
36	2 13 0	2 6 6	76	11 10 8	11 8 6
37	2 15 0	2 11 0	77		12 7 6
38	2 17 0	2 12 9	78		13 6 8
39	3 0 3	2 17 9	79		14 15 10

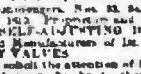
* EXAMPLE.—A Gentleman whose age does not exceed 36, may insure 1,000*l.* payable on his decease, for an annual payment of 28*l.* 10*s.*; and a Lady of the same age can secure the same sum for an annual payment of 18*l.* 15*s.* 6*d.*
Prospectuses with the rates of premium for the intermediate ages, and every information may be had at the Head Office in York, or of any of the Agents.
FIRE INSURANCES are also effected by this Company on the most moderate terms. AGENTS are WANTED in those Towns where no operations have been made. Applications to be made to Mr. W. L. NEWMAN, Actuary and Secretary to the Company; or to Mr. HENRY DINSDALE, 13, Wellington-street, Strand, Agent for London.

GUTTA PERCHA TUBING.—May be buried for years, without injury, and it is therefore valuable for conveying water, chemicals, &c. It is peculiarly valuable for liquid manure drain, and soil pipes. Being a bad conductor, it is not affected by the frost of winter or drought of summer, like metal or leather. Its strength is extraordinary, the small half-inch diameter tubing bearing a pressure of 500 lbs. on the square inch, without bursting. The smaller sizes may be had in 100 feet, and the larger in 50 feet lengths. The joints are easily made. As a reduction of nearly 1 is made value for conveying purposes in lieu of lead. Every variety of article manufactured by the Gutta Percha Company, Patentees, 18, Wharf-road, City-road, London: and sold by their wholesale dealers.

PATENT VULCANIZED INDIA-RUBBER TUBING for the Fittings, Chemical Purposes, Fire Engines, Steam Pumps, &c.—JAMES LINE HANCOCK, Sole Manufacturer and Licensee of Messrs. Newell road, London, beg to invite the attention of Architects, Builders, Engineers, and the trade generally, to the Vulcanized India Rubber Tubing, which is now manufactured from 1-inch bore and upwards, in lengths from 30 to 150 feet, and of various strengths suitable to the purposes for which it is required. The CANTAGEL HOSE for FIRE ENGINES, LIQUID MANURE, and for conveying HOT WATER to BATHS in DWELLING-HOUSES and BREWERIES, manufactured to resist great pressure of any breath and use to order.
*** Testimonials may be had on application to the Manufactory.
N.B. VULCANIZED WASHERS and SHEET RUBBER for Steam and Hot Water Pipes, and Packings for Pistons and Glands, Valves of Steam Engines, cut any size to order.

TO BUILDERS AND PLUMBERS.
THE attention of the Trade is called to JOHN WARNER & SONS' PATENT VIBRATING STANDARD PUMP,
which is recommended for the simplicity of its construction, and the ease with which it works.
By the introduction of the vibrating standard the cumbrous gear are rendered unnecessary, rendering the power comparatively less than pumps made on the old plan.
Beer and Water Engines for raising fluids from a depth not exceeding 30 feet; also, Garden Engines manufactured on the same principle.
JOHN WARNER & SONS,
6, Crescent, Jewin-street, London,
Manufacturers and Patentees.

TO ENGINEERS, MACHINISTS, BRASSFOUNDERS &c.
FENTON'S PATENT ANTI-FRICTION METAL—a cheap substitute for brass in all kinds of machinery bearings, pumps, taps, &c., has now been in use for upwards of five years by most of the principal railways and engineers in this country and upon the continent. Its advantages over brass are increased durability, less wear in the journal, and economy in first cost.—For particulars and testimonials apply to BUTT and ALLEN, 31, Pall-Mall, Manchester.



TO BUILDERS AND OTHERS.
HART and SONS, Wholesale and Manufacturing Ironmongers, Nos. 33, 34, and 35, Wych-street, Strand. Established 1815. Proprietors and sole Manufacturers of PITT'S PATENT SELF-ADJUSTING IRON FURNITURE and REMOULDS, and Manufacturers of Dr. ARNOTT'S VENTILATING CHIMNEY VALVES.
HART and SONS beg to solicit the attention of Builders, House Decorators, Smiths, Bell-hangers, &c. &c. to their extensive and well selected stock of IRON FURNITURE in every suitable material, as made with finger plates, bell-pulls, levers, &c., and also to their
LOCKS and LATCHES in cast iron, zinc, dovetailed, iron pare, enamelled, &c., of all qualities, including Barron's, Bramah's, Chubb's, and Pitt's Patent.—To these
GENERAL IRONMONGERY wrought and cast nails, screws, hinges, bolts, &c. &c.
BRASS PULLEY, Bell-cranks of all descriptions, cornice poles, mortice locks, sash door handles, cast and hot rolls, window guards, Kensington locks, &c. &c.
WINDOW FITTINGS of all kinds, including brackets, rods, arms, sliding sockets, rings, &c. &c.
DOOR SPRINGS and HINGES, including Redmond's, Smith's, Collinge's, Learoyd's, and Cotterell's patents.
WINDOW BLIND FITTINGS of the most approved principle.
HERRINGHAM'S and all other VENTILATORS.
LEAF RACK BOLT MORTICE LOCKS, for which there are AGENTS, as well as for all inventions of merit as soon as perfected.
HART and SONS, aware that the practice of publishing NET price-lists is injurious to the interests of the trade generally, are unwilling to follow it, but at the same time they beg to assure their friends that their prices will be found equally as low as those of any other respectable house.